CLAIMS

1. A method for extracting a plurality of analytes from a sample, comprising the steps of: providing a plurality of extraction probes capable of adsorbing an analyte, wherein said extraction probes are comprised of a solid support and an extraction phase;

contacting said extraction probe with a sample suspected of comprising at least one of the analytes; and

separation of said extraction probe from the sample.

- 2. The method of claim 1, wherein said solid support is a microparticle.
- 3. The method of claim 2 wherein said microparticle is a nanobarcode.
- 4. The method of claim 1, wherein said solid support is a bead.
- 5. The method of claim 1 wherein said solid support is a fiber.
- 6. The method of claim 1 wherein said extraction phase is combinatorially-derived.
- 7. The method of claim 1, wherein said extraction phase is a polymer.
- 8. The method of claim 1, further comprising the step of detecting for at least one analyte extracted from said sample.
- 25 9. A method for simultaneously conducting a plurality of assays to a plurality of analytes comprising:

contacting a solution that may contain the analytes with a plurality of extraction probes, wherein each extraction probe comprises a solid support and an extraction phase, and wherein the nature of each extraction phase is encoded by the solid support to which it is associated; and detecting for the presence of at least one analyte associated with said extraction probes.

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10. A method for extracting a plurality of analytes from a sample, comprising the steps of: providing a position-addressable array of extraction probes, such probes comprised of a solid support and an extraction phase;

providing an array of capillaries addressable by the array of extraction probes, the capillaries containing alliquots of the sample;

contacting the array of extraction probes with the array of capillary tubes such that the extraction probes are positioned within the capillary tubes;

separating the array of extraction probes from the array of capillaries, such as that the extraction probes are separated from the sample.

- 11. The method of claim 10 wherein each capillary tube comprises a different sample.
- 12. A plurality of extraction probes, comprised of a solid support and an extraction phase, wherein said extraction probes comprise of a plurality of different types of extraction phases.
- 13. The plurality of extraction probes of claim 12 wherein the nature of the extraction phase is encoded by the solid support.
- 14. The plurality of extraction probes of claim 13 wherein the solid support is a microparticle.